

ABSTRACT

In one embodiment, a printing device comprises a printer configured to print upon paper, a surface-engaging member associated with the printer and configured to physically engage a paper surface, the surface-engaging member comprising a flexure material body that is supported in a cantilevered disposition proximate a piece of paper to be printed upon by the printer, a reflective member joined with the surface-engaging member, one or more light sources in operable proximity to the reflective member and configured to project light energy toward the reflective member, and a position detector mounted in operable proximity to the reflective member and configured to receive light energy that is reflected from the reflective member, the surface-engaging member being configured for displacement by the paper's surface in accordance with variations in the roughness of the surface sufficiently so that light that is reflected by the reflective member and received by the position detector can be utilized to ascertain a measure of the paper surface's roughness.